EXCOM 81-9017

18 May 1981

MEMORANDUM FOR: Executive Committee Members

FROM : Robert M. Gates

SUBJECT : Fiscal Year 1981 Report on ADP in the CIA

REFERENCE : Information Handling Task Force Study, 28 August 1980

1. The attached memorandum from the Director of Data Processing (ODP-81-609) is in fulfillment of CIA policy regarding Executive Committee review and management of ADP. It substitutes for the detailed briefings of which previous ADP reviews have consisted and which circumstances in this transition year have precluded. The memorandum provides an overview of ADP operations which will assist EXCOM principals in the forthcoming review of the Fiscal Year 1983 Program. Questions generated by the memorandum can be answered by supplemental briefings, if necessary. Your concurrence in the recommendation stated in the penultimate sentence of the memorandum's paragraph 12 is suggested.

2. In the future, as proposed by Reference, reviews of the state of CIA information handling will be presented by the recently established Office of the Information Handling Systems Architect.

[redacted] 25X1

Robert M. Gates

[redacted] 25X1

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ODP-81-609

18 MAY 1981

MEMORANDUM FOR: Executive Committee Members

VIA : Deputy Director for Administration

FROM : Bruce T. Johnson
Director of Data Processing

SUBJECT : FY 1981 Report on ADP in the CIA [redacted] 25X1

REFERENCE : Memorandum to DDCI from D/ODP dtd. 16 May 1980, Subject: Fiscal Year 1980 Review of Automatic Data Processing (ADP) Projects (Exec. Registry 9037-80/2)

Summary: This memorandum is a substitute for the annual EXCOM briefing on ADP in CIA. It concentrates on the services provided by the Office of Data Processing (ODP) and concludes that ODP's existing and planned capabilities are basically adequate to meet the foreseeable central computer service requirements of CIA. Some new investments to ensure reliability and availability will be necessary, and an increase in applications development manpower seems called for. [redacted] 25X1

1. Introduction: In 1977 the management of CIA's ADP resources was studied by the Executive Advisory Group (EAG), the forerunner of today's Executive Committee. Out of those studies developed the practice, beginning in 1978, of having the Director of Data Processing present a "State of ODP" briefing to the Committee, followed by reports from user components on major ADP activities, which were expected to cost $250,000 in the current fiscal year for ongoing projects, or that same amount over three years for new initiatives. [redacted] 25X1

2. In fiscal years 1978, 1979, and 1980, late in the first quarter or early in the second quarter, the EXCOM devoted several meetings to the review of ADP, beginning each time with an ODP

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[redacted]

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overview based upon data collection by ODP from major users of ADP. Following each annual review, a guidance memorandum was issued, validating the proposed use of ADP resources and establishing limits on the growth of individual projects. Subsequently, if rates of consumption of these resources increased enough to cause a project to exceed its authorized limit by more than 10%, the component was required to notify the Comptroller and submit a justification for the increase. After the 1980 review, at the request of the DDCI, a summary of the results of the review was prepared (see reference). [redacted] 25X1

3. Subsequent to the 1980 review the Information Handling Task Force completed its work and, as a result of one of its recommendations, the position of Information Handling Systems Architect was established. In approving a tentative charter for the Architect, the EXCOM included the responsibility to report on the "state of Information Handling to EXCOM," adding parenthetically "(incorporates ADP review)." [redacted] 25X1

4. As FY 1981 began, ODP once more collected the data needed for its part of the annual review, although the timing and nature of the review were uncertain, given the arrival on the scene of the new Architect and the interruption in the routine work of the EXCOM and its staff caused by the transition to new Agency management. Discussions involving the EXCOM staff, the Architect, and ODP led to the decision to submit a brief summary report as a substitute for the briefings previously provided. 25X1 That report follows. [redacted]

5. Agency ADP Budget: Attachment A represents the Agency ADP budget for fiscal years 1980, 1981, and 1982, by Directorate, with separate entries for SAFE, NPIC and ODP, which together account for 84% of the 1981 total. In FY 1981 the Agency ADP budget increased 18% over FY 1980, rising from [redacted] 25X1 principally due to the scheduled rise in the SAFE funding profile, although imagery-related budgets also rose and of course inflation played its part. It is estimated that in this fiscal year Agency staff personnel will devote [redacted] to 25X1 ADP-related activities, with the DDA accounting for 61% of the effort. The ADP budget for FY 1982 is 35% larger than FY 1981, the increase attributable to the upgrade of the NPIC Data System (approximately [redacted] and CAMS 2 25X1 [redacted] plus a few smaller projects like 4C and, of course, 25X1 inflation. [redacted] 25X1

6. Consumption of ODP Resources in FY 1980: Each month ODP provides its customer components with a Project Activity Report (PAR) which shows how much of ODP's resources were consumed by

each of the component's ADP projects. The pricing system is designed to permit nominal "recovery" of the entire ODP budget. The primary charges, accounting for about 65% of the total, are for the use of central processing services. The other charges included direct contract costs (15%), application software development and maintenance (12%) and dedicated support such as computer systems, terminals and direct access storage space

25X1 [redacted]

7. ODP Supported Major Projects by Directorate: ODP supported 17 major ADP projects in FY 1981. Attachment B shows the level of investment in these projects by Directorate, and the percentage of increases expected in their use of ODP's major services, Batch, Interactive (VM), and Database (GIMS). Attachment C lists each of these 17 major ADP projects, which range from 1 to 18% of the ODP budget and together consume 57% of that budget. (We also received reports on 17 other projects which did not meet the $250K threshold requirement but which were significant enough to include in the annual review. The projects in this second category account for an additional 6% of ODP's

25X1 resources.) [redacted]

8. Major Component-Budgeted ADP Initiatives: Attachment D provides directorate-level summary information for FY 1981 and 1982 on 14 component-budgeted ADP initiatives, and Attachment E identifies the individual projects. Although primarily funded by the customer component, many of these projects entail some level of ODP support, as shown in the tables. Most of these projects will continue into FY 1983, and resources to support them have been included in the Program Plans submitted by the sponsoring components. (Because SAFE is the subject of separate review by its Steering Committee and the Directors of DIA and CIA, it has been excluded from previous EXCOM reviews, and its budget has not been included in Attachments D or E. The ODP budget for the support of SAFE development is included in Attachment C,

25X1 however.) [redacted]

9. Review of Major Projects: Our review of the data on these major projects reveals several issues worth highlighting.

a. Community-related Activities. The COMIREX Automated Management System (CAMS) continues to be the largest of the ODP-supported projects. Total cost of services represents [redacted] of the ODP budget. More significant, however, is the continuing CAMS requirement for [redacted] of the staff employees in the applications component of ODP [redacted] of the total applications staff when one counts contractor personnel).

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b. Interface to Central Data Banks. Several component-budgeted projects involve minicomputer-based systems for specialized processing needs. Interfaces to central ODP files are required for access to pertinent data. This relatively new requirement for delivery of large amounts of data in electrical form to remote processing sites further heightens our already growing concern over the availability and reliability of data processing and communications facilities to support the rapidly increasing number of users who require frequent and immediate access to their data. New investments will have to be made to ensure that our network of computer and communication systems operate with the necessary availability and reliability to guarantee the continuing delivery of critical services to our end users.

c. Terminal Availability. The tight limits imposed on ODP for new terminal acquisitions continue to provide a constraint on the growth of project activity. Budgetary restrictions have hampered our ability to provide anything beyond the minimum level program requirements of our end users. By FY 1983, we will only be able to fund 77% of our user's minimum level requirements and less than 25% of their overall requirements. At least two directorates (DDO and NFAC) are planning to fund their most critical requirements that cannot be supported by ODP.

d. Applications Development Resources. The success of certain projects reviewed is very much dependent upon the availability of adequate program development resources. Because of the increasing maintenance burden we have had to bear as new systems are added to the existing base of developed production systems, the present share of ODP resources available for new applications development has been shrinking drastically at the same time that the requirement for new application development from virtually all parts of the Agency has reached an unprecedented level (the backlog exceeds 50 workyears). Although our Program Plan for FY 1983 contains 35 additional staff positions to help meet this need, our problems are more immediate. The schedules for several of the ODP-supported projects (in particular, PAYROLL) are in jeopardy as a result. [redacted] 25X1

10. ODP Workload Trends: The major projects provide a basis for projecting only part of the demand for ODP's services. The trend lines for services to all projects, large and small, are all rising. We measure these trends for Batch Service (average prime-time as well as average peak 24-hour workload), Interactive (VM) Services, Database Management Services (GIMS), DDO Services and CAMS Service.

a. Batch: Still the most economical way to meet the needs of a large number of users, Batch continues to grow at the rate of 10 to 15% annually. To avoid driving customers to the use of more expensive on-line service, we size our Batch capability to provide reasonable prime-time turnaround, with assurance of 24-hour turnaround capacity for lower priority work. When any other service is forced into its backup configuration, Batch is usually the first to be reduced, but because it can be divided among several CPU's the impact on users can be cushioned. Batch capacity is effectively augmented whenever other demands cause us to expand our total computing power, and plans for other services ensure adequate capacity here.

b. Interactive: VM service, upgraded in FY 1980 to an Amdahl V8, continues to grow and a larger IBM 3033 multiprocessor (MP) was installed in March 1981. Currently, there are [redacted] users and the issuance of passwords for new users continues to increase steadily. In 1983 we project a workload which will exceed the capacity of the IBM 3033 MP. Future expansion will require ODP to examine alternative means of providing support to VM users. The DO already has a copy of the VM system available in the Special Center which affords protection of their data.

25X1

c. Database Management Systems: The Generalized Information Management System (GIMS) is used to provide central Database Management System (DBMS) services. Currently, there are some 35 distinct databases on the single GIMS CPU, with 18 more scheduled for implementation in FY 1981. Small increases in CPU power are projected in FY 1981 and FY 1982 to meet a 29% rate of increase in demand. This service is also available as a separate service in the Special Center.

d. DDO Services: The Directorate of Operations has provided ODP with a comprehensive set of near- and long-term requirements. The most significant of these, in terms of their impact on ODP's computer systems plans, include (1) the DDO's requirement for compartmented VM and GIMS services, and (2) its requirement for a single system capable of running all of its critical on-line applications. This second requirement is to enable effective operation of these applications even when the DO second machine has been preempted to backup CAMS service. Plans to meet these requirements call for upgrading one of the two DDO machines in FY 1981 and the other in FY 1982. Both of these upgrades will be accomplished by moving larger CPU's from the Ruffing Computer Center to the Special Center.

e. CAMS: The COMIREX Automated Management System (CAMS) will grow because of its direct support to overhead reconnaissance programs. The

current CAMS system is expected to satisfy user requirements until 1984 when major new collection systems come onstream. A follow on system, CAMS 2, will then be required. A large CPU will be obtained for development of this new system and will then become the production system for CAMS 2 and also support graphics capabilities using minicomputers as interfaces. [redacted] 25X1

11. ODP Plans and Investments: The major thrust of ODP planning and investment through FY 1983 is focused on ensuring that Batch, Interactive (VM), Database, DDO services, and CAMS have the necessary capacity, responsiveness, and availability to meet growing Agency needs.

a. FY 1981: Two of our basic services will require upgrading in FY 1981 to meet increased workloads. The IBM 3033 MP system was installed to meet the need for more capacity on our VM interactive system. This service had reached saturation with [redacted] simultaneous users online. The multiprocessor will allow us to handle over [redacted] simultaneous users with satisfactory response time. An existing Amdahl V6 will be freed from its present use to replace the computer system supporting critical DDO services. Because of the use of the same hardware architecture for all ODP general services, it is possible to upgrade multiple services with the procurement of a single new computer system. More capacity will be provided as a result to handle the 18 new GIMS applications planned for FY 1981. 25X1 25X1

b. FY 1982: In FY 1982 a new computer system will be installed to meet the planned growth in batch processing requirements. This acquisition will allow us to also upgrade the backup capability for both DDO services and CAMS needs. A second computer will be installed for the development needs of the CAMS 2 project. A modest upgrade in database services will also be provided. In order to meet the continuously growing requirement for online storage, we will embark on a major

upgrade of our DASD (Direct Access Storage Devices) capacity starting in FY 1982 when technologically superior DASD will be available at substantially lower cost than current technology.

c. FY 1983: Our planning for FY 1983 includes one new processor to meet the estimated interactive workload of over [redacted] simultaneous users on the VM system. Other than VM, no additional processing upgrades are anticipated in FY 1983. In the absence of any new requirement, the FY 1982 upgrades will be adequate to support our other major services through the end of FY 1983. 25X1

d. FY 1984 and Beyond: Our plans for FY 1984 and beyond call for annual upgrades to meet projected workload demands for computer services. We will continue to reallocate to other needs equipment that is replaced as a result of upgrading one service, in line with our policy of effecting improvements in multiple services from the procurement of a single new processor. The adequacy of central computer service can thus be guaranteed provided that the ODP budget base is protected from the impact of inflation. [redacted] 25X1

12. Conclusion: Although there are outstanding issues in the areas of applications development, terminal availability and system reliability, as noted in paragraph 9 above, it is apparent that ODP has or will have adequate central computing and data storage capacity to meet projected demand through FY 1982 and our Program Plan for FY 1983, if approved, will ensure that we continue to have the necessary computer power. In view of the fact that we are already well into the third quarter of this fiscal year, we recommend that we and the requesting components be authorized to continue with the major projects listed in the attachments at the level of investment requested, subject to change as a result of decisions on the 1983 Program. Until formal action is taken to change the reporting process, ODP will continue as in the past, alerting customers when overruns appear likely on ODP-supported activities, and assisting them to report the reasons for increased requirements to the Comptroller. [redacted] 25X1

25X1

[redacted]

Bruce T. Johnson 25X1

Attachments: a/s

Approved For Release 2006/05/01 : CIA-RDP84B00890R000500030051-6

DD/A Reg. 80-1265
Exec. Reg. 9037-80/2

ODP 0-649
16 May 1980

MEMORANDUM FOR: Deputy Director of Central Intelligence

VIA: Deputy Director for Administration

FROM: Bruce T. Johnson
Director of Data Processing

SUBJECT: Fiscal Year 1980 Review of Automatic Data Processing (ADP) Projects [redacted] 25X1

REFERENCE: Your memorandum to EXCOM members, same subject, dated 18 March 1980 (EXCOM 9037-80)

1. This memorandum responds to reference request that I summarize the lessons learned during the EXCOM review of ADP projects and that I solicit the views of the EXCOM members on how the process could be improved next year. Paragraph 7 contains several recommendations 25X1 for your consideration. [redacted]

2. We can summarize the lessons learned in the FY 1980 Review as follows:

a. In its FY 80 review the EXCOM received ADP Project Decision Forms covering 29 ODP-supported projects and 11 component-budgeted projects representing a total cost of [redacted] of 25X1
25X1 the [redacted] identified in the FY 80 budget as ADP money. (These figures exclude [redacted] 25X1 for Project SAFE, which is separately reviewed by its CIA/DIA Steering Committee.) Staff review of these summaries led to requests for briefings on ten of these projects (five ODP-supported and five other). The briefings, including the ODP overview, were presented in four meetings of the Committee and took a total of five hours, less than half the time consumed by the 1979 process. As a result of these reviews all on-going projects except accelerated CRAFT were approved at the FY 80 resource levels requested (see reference). Specific comments on individual projects are 25X1

[redacted]

unnecessary in this summary; details may be found in the Project Decision Forms. (CRAFT has subsequently been the subject of a separate review.) [redacted] 25X1

b. The ODP-supported projects covered by the review represent [redacted] of the resources controlled by ODP. From the overview of ODP presented by the Director of Data Processing, the EXCOM learned that customer dependence on and demand for all forms of computer service (batch, database or GIMS, and interactive or VM) continues to rise, and customer projections of support needed for the activities under review show that the growth curves for these services are not likely to change significantly. Plans for meeting this growing demand were outlined in general terms. Technology is our ally in this supply/demand struggle and it is believed that given the drop in the unit cost of computing, the Office of Data Processing will be able to keep ahead of demand by judicious upgrading of its equipment to take full advantage of technological developments. Such upgrades in general purpose central ADP services will be possible if ODP is able to maintain its budget base at today's levels, adjusted for inflation. [redacted] 25X1

c. One trend was apparent which could alter this budgetary equilibrium. Community-related activities are consuming an increasing proportion of Agency ADP resources. The most dramatic example is CAMS (COMIREX Automated Management System), which has risen from 11% of ODP's budget in 1978 to 20% in 1980. ODP has just been asked to assume responsibility for the development of CAMS II, to support tomorrow's imagery-support needs. Cost estimates are in preparation, but the additional resources needed for this effort will further increase CAMS' percentage of ODP's budget. An impending NFIB/IHC approval of a proposal to make CIA's RECON bibliographic system available to the Community has major resource implications as well, but the proposal was contingent upon the availability of non-CIA funding. DDS/IRO, which is managing the review of the proposal, has indicated that it will attempt to provide RMS funds for this project. [redacted] 25X1

d. The growth of CAMS is but one element in the development of Imagery as the major consumer of ADP resources. Programmatic distribution of CIA's ADP budget in FY 1979 showed [redacted] 25X1

25X1 [redacted] 25X1

25X1

e. Comparable distributions of ODP's resources [redacted]

f. Agency budgets show [redacted] workyears attributed to ADP, about half of them in ODP itself. No significant changes in these levels are projected for FY 1981. Trends in "do-it-yourself" computing suggest that an increasing amount of time not identifiable as ADP-related is expended on the development and use of ADP programs, however. [redacted] 25X1 25X1

g. Overall, except for SAFE, the Agency ADP budget is in a steady state when 1979, 1980 and 1981 are compared. The $8 million rise in 1981 is almost totally attributable to SAFE, whose established funding profile shows an increase [redacted] 25X1

h. Finally, this year's review showed that on balance the 1979 projections had been more accurate than those of the previous year. No unreviewed projects crossed the review threshhold of $250,000 during FY 1979, although several of the reviewed projects exceeded their original requested resource levels. Fortunately, ODP was able to allocate non-prime-time batch service to meet the unanticipated demand. The situation was aided by the fact that, due to changes elsewhere in the programs, several large projects in OD&E and OWI consumed less than had been predicted. Overall, this monitoring aspect of the review process seems to be working well. [redacted] 25X1

3. The comments of EXCOM members on the review process were generally supportive, and no one suggested that we forego the practice. Most suggested, directly or indirectly, that we attempt to reduce further the amount of time the members themselves spend on the review. Additional attention to critical policy, planning and organizational issues was urged. D/NFAC urged highlighting of Community-related projects. The Comptroller suggested a preview procedure to improve the focus of the briefings presented to the Committee, and additional emphasis on plans for forthcoming years. He also recommended deferring any changes in the process until the Information Handling Task Force has completed its work and reported to the EXCOM. 25X1

4. The IH Task Force may indeed offer recommendations which would have a direct bearing upon the ADP review process. Any newly created central information handling structure, whether it be a small staff element or a major line organization, would have to play a part in any review of the uses of ADP. Furthermore, its involvement would probably change the nature of the review, for the communications and records management elements of information handling could hardly be divorced from any review managed or influenced by such an entity. This fact of the interrelationship of the several aspects of information handling leads to the fundamental question: Will it be appropriate, in the future, to conduct a review of ADP projects which does not also cover communications and other aspects of information management? Many of the 40 projects covered in the FY 1980 review are as dependent on effective communications as on responsive computers. Should we redirect our review to make it more comprehensive? But, if we do, how do we avoid making it so large and encompassing as to become totally unwieldy as a target for EXCOM attention? 25X1

5. Related to this question of broader content is the matter of future versus current requirements. ODP has in recent weeks been supporting the Office of the Comptroller in its efforts to assess ADP-related requests (in this case for minicomputers) found in component programs for FY 1982. In many cases these future needs were not mentioned in the Project Decision Forms prepared for the FY 1980 review. The question arises: Should the ADP Review, however broadened in scope, give more emphasis to outyear requirements and provide advance information about the investments which will be proposed in the annual Program Plans? 25X1

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6. The answers to these questions may be provided, at least in part, by the IHTF study and the debate it stimulates. Meanwhile, it is clear that we have a concensus in the desirability of some form of periodic review of our use of ADP. If we are to have such a review in 1981, we will have to begin preparing the necessary forms and instructions by midsummer, when, in all probability, final decisions will not yet have been reached on the Task Force recommendations. The reconfirmation of existing monitoring procedures and thresholds contained in paragraph 2 of reference will ensure that we can obtain the basic data needed for a 1981 review. One minor addition to those standing instructions might be useful, given our 1979 experience. If ODP could be advised of significant reductions (-20% or more) in expected current-year use of ODP services, we could plan more effectively for the reallocation of the unused capacity to meet unanticipated growth in use by other customers. 25X1

7. The foregoing leads to the following recommendations:

a. Amend reference to require components to report major reductions (20% or more) in expected ADP usage rates for reportable ADP projects during the remainder of FY 1980. 25X1
(Action: EXCOM Staff in coordination with ODP)

b. Request the Information Handling Task Force to address the review process as a part of their final report on their study of information handling in CIA. Any proposals on this subject should seek to reduce further the time investment of EXCOM members and should reflect increased emphasis on issues and future resource needs.
(Action: IHTF) 25X1

c. Defer any other changes in the ADP review and reporting process until after the Task Force Report is available. 25X1

/s/ Bruce T. Johnson

Bruce T. Johnson

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SUBJECT: Fiscal Year 1980 Review of Automatic Data Processing (ADP) Projects [redacted] 25X1

CONCUR:

DON WORTMAN
Deputy Director for Administration

23 MAY 1980
Date

APPROVED:

Recommendation 7a is approved ( ) disapproved ( )
Recommendation 7b is approved ( ) disapproved ( )
Recommendation 7c is approved ( ) disapproved ( )

/S/
Deputy Director for Central Intelligence

27 May 1980
Date

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EXCOM 9037-80

ODP #

18 March 1980

ODP # C-335

MEMORANDUM FOR: Executive Committee Members

FROM : Deputy Director of Central Intelligence

SUBJECT : Fiscal Year 1980 Review of Automatic Data Processing (ADP) Projects (U)

REFERENCE : Memo to Executive Committee Members from DDCI, dated 23 May 1979, Subject: Fiscal Year 1979 Review of Automatic Data Processing

1. With the exception of the DDO accelerated CRAFT system, all operating FY-1980 ADP projects reviewed by the Executive Committee and currently budgeted are approved at the resource level requested. A decision on the CRAFT project will be made after examining the findings of the Comptroller's review of the accelerated CRAFT system proposal. Unfunded projects are approved subject to Comptroller approval of reprogramming or funding requests. (AIUO)

2. Procedures for monitoring current year ADP costs and reviewing changes in requirements will remain the same as those outlined in the referenced memorandum with one exception: If costs of component-budgeted ADP projects are projected at any point in the fiscal year to exceed the initial authorizations beyond the reprogramming authority of the Deputy Directors, components will request prior Comptroller approval. (U)

3. In keeping with the procedures established in the referenced memo, the Committee will incorporate a review of major ADP capital investments in the 1982 program plan during our review of the program. (U)

4. To complete this year's ADP review, I would like the Director of ODP to summarize the lessons learned during this process and to solicit your views on how the process could be improved next year. (U)

STAT

Frank C. Carlucci

cc: D/ODP

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